

ABSTRACT

The solid oxide fuel cell according to the present invention is directed to a support type or self-support type single cell in which four sides or opposite two sides of corners of the single cell are downwardly bent in an inverted U shape and have gas channels in the inner side and/or outer side with a straight line structure or lattice shape structure, so that a separating plate can be used without gas channels or channel support. A smooth flow of a reaction gas is implemented in the directions of the air electrode and the fuel electrode of a single cell.